



Abstract 0334-Figure: Predictors of appropriate ICD therapy

LVEF was $26 \pm 6\%$. By univariate comparison, LVDD ≥ 65 mm ($p=0.035$) and lack of diuretic ($p=0.024$) were significant predictors for ICD therapy. ICM and NIDCM patients benefit equivalently from ICD implantation ($p=0.941$). By multivariate analysis, elderly patients ≥ 65 y (HR 1.92, $p=0.032$), LVDD ≥ 65 mm (HR 2.01, $p=0.022$) and lack of diuretic (HR 0.31, $p<0.001$) were all significant independent predictors for ICD therapy. Absence of CRT device was closed to be significant (HR 0.53, $p=0.062$), but was significant in NIDCM population ($p=0.007$). Onset atrial fibrillation ($p=0.027$) and hospitalization for acute heart failure ($p=0.002$) were significantly associated with ICD-delivered therapy.

Conclusions: ICD therapy occurred in 17.7% of primary prevention patients with both ICM and NIDCM. In multivariate analysis, age ≥ 65 y, LVDD ≥ 65 mm and absence of diuretic were predictive factors for ICD therapy. Presence of CRT device was closed to be significant. There was no difference by considering heart failure etiology, ICM and NIDCM patients benefited from ICD equivalently.

0340

Predictive factors of appropriate shock therapy in patients with implantable cardioverter defibrillator

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Background: Electrical storm is an increasingly common and life-threatening syndrome that is defined by 3 or more sustained episodes of ventricular tachycardia, ventricular fibrillation, or appropriate shocks from an implantable cardioverter-defibrillator within 24 hours. The clinical presentation can be dramatic. Appropriate shock therapy (AST) occurs in the minority of patients with implantable cardioverter defibrillators (ICDs). We assessed which patients received AST and whether there were any predictive factors.

Methods: We retrospectively analysed data from 13 patients implanted with ICDs at our institution who received AST. Stored electrogram data were analysed. Various clinical echocardiographic and electrophysiological variables were studied.

Results: Impaired LV function was the most important factor significantly associated with AST.

Conclusion: Certain pre-procedural variables predict AST. It is important to determinate them to predict which patients will receive shock therapy.

0299

Use of clinical follow-up and pacemaker memories to define predictors of complete atrio-ventricular block or sudden death after balloon-expandable transcatheter aortic valve implantation

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Backgrounds: Predictors of atrio-ventricular block (AVB) after transcatheter aortic valve implantation (TAVI) have been described as those leading to syncope or permanent pacemaker implantation (PPI), and thus have been assimilated to criterias used by the investigators for pacemaker implantation.

Aims: Evaluating the true predictors of AVB following TAVI, using clinical follow-up and devices' memories.

Methods: Between 2011 and 2013, 213 patients without previous PPI underwent TAVI with an Edwards SAPIEN XT balloon-expandable valve using a femoral approach, in our institution. All patients had continuous cardiac rhythm monitoring ≥ 24 hours after TAVI. ECG was performed the following 2 days after TAVI, and 1 month later. Median follow-up for pacemaker interrogation was 8 months.

Results: Complete AVB occurred in 22 patients (10.3%), sudden death in 8 patients (3.8%). Pacemaker was implanted in 26 patients (12.2%). For 20 of them (77%), pacemaker memories showed complete AVB episodes or $\geq 2\%$ ventricular pacing, despite the use of a minimizing ventricular pacing algorithm. Results of the multivariate analysis are shown below..

Abstract 0299-Table

	No complete AVB or Sudden death (%)	Complete AVB or Sudden death (%)	Odds Ratio (95% CI)	P
Preexisting RBBB	15 (8)	13 (43)	6.62 (1.7 - 26.3)	0.007
New persistent LBBB	14 (8)	8 (33)	10.1 (2.5 - 41.7)	0.001
1 st degree AVB after TAVI	34 (27)	9 (56)	3.48 (1.1 - 11.2)	0.04

LBBB: left bundle branch block; RBBB: right bundle branch block

Conclusions: Our findings confirmed pre-existing RBBB and new persistent LBBB as predictors of AVB following TAVI. We also demonstrated here for the first time, first degree AVB is an independent predictive factor of severe conduction disorders after TAVI.